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(FILE 'HOME' ENTERED AT 08:15:32 ON 19 AUG 2008)

FILE 'CAPLUS' ENTERED AT 08:16:17 ON 19 AUG 2008

E US2007-589920/APPS

L1

1 S E3

SEL L1 RN 1-

FILE 'REGISTRY' ENTERED AT 08:23:25 ON 19 AUG 2008

L2

417 S E1-E417

E "1H-(1)BENZOPYRANO(3,4-F)QUINOLIN-9-OL, 5-((2-FLUORO-3-METHYL

L3

1 S E3

FILE 'CAPLUS' ENTERED AT 08:27:59 ON 19 AUG 2008

L4

2 S L3

FILE 'USPATFULL, USPATOLD, USPAT2' ENTERED AT 08:30:42 ON 19 AUG 2008

L5

1 S L3

FILE 'TOXCENTER' ENTERED AT 08:32:56 ON 19 AUG 2008

L6

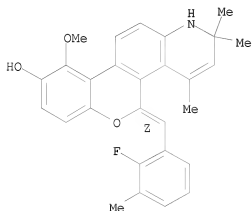
2 S L3

L1 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2005:979655 CAPLUS <LOGINID:20080819>
 DOCUMENT NUMBER: 143:286410
 TITLE: Preparation of 5H-chromeno[3,4-f]quinolines as
 glucocorticoid receptor modulators
 INVENTOR(S): Zhi, Lin; Ardecky, Robert J.; Phillips, Dean; Tyhonas,
 John S.; Karanewsky, Donald S.; Higuchi, Robert I.;
 Hudson, Andrew Richard; Roach, Steven L.; Vassar,
 Angie C.; Li, Yongkai; Adams, Mark E.; Valdez, Lino
 Juan; Cuervo, Catalina
 PATENT ASSIGNEE(S): Ligand Pharmaceuticals Incorporated, USA
 SOURCE: PCT Int. Appl., 352 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005082909	A1	20050909	WO 2005-US6627	20050224
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2557278	A1	20050909	CA 2005-2557278	20050224
EP 1718653	A1	20061108	EP 2005-724220	20050224
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
CN 1950375	A	20070418	CN 2005-80013058	20050224
BR 2005007987	A	20070731	BR 2005-7987	20050224
JP 2007523950	T	20070823	JP 2007-500828	20050224
MX 2006PA09544	A	20061115	MX 2006-PA9544	20060822
IN 2006DN04910	A	20070810	IN 2006-DN4910	20060825
US 20070281959	A1	20071206	US 2007-589920	20070420 <--
PRIORITY APPLN. INFO.:			US 2004-548154P	P 20040225
			WO 2005-US6627	W 20050224
OTHER SOURCE(S):	MARPAT 143:286410			
REFERENCE COUNT:	1	THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT		

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2008 ACS on STN
RN 864054-14-8 REGISTRY
ED Entered STN: 27 Sep 2005
CN 1H-[1]Benzopyrano[3,4-f]quinolin-9-ol, 5-[(2-fluoro-3-methylphenyl)methylene]-2,5-dihydro-10-methoxy-2,2,4-trimethyl-, (5Z)-
(CA INDEX NAME)
OTHER NAMES:
CN (Z)-5-(2'-Fluoro-3'-methylbenzylidene)-1,2-dihydro-9-hydroxy-10-methoxy-
2,2,4-trimethyl-5H-chromeno[3,4-f]quinoline
CN LGD 5552
FS STEREOSEARCH
MF C28 H26 F N O3
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Double bond geometry as shown.

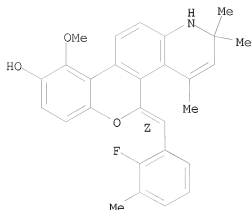


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2008:24690 CAPLUS <<LOGINID::20080819>>
DOCUMENT NUMBER: 148:253667
TITLE: Antiinflammatory glucocorticoid receptor ligand with reduced side effects exhibits an altered protein-protein interaction profile
AUTHOR(S): Miner, Jeffrey N.; Ardecky, Bob; Benbatoul, Khalid; Groffoths, Kimberly; Larson, Christopher J.; Mais, Dale E.; Marschke, Keith; Rosen, Jon; Vajda, Eric; Zhi, Lin; Negro-Vilar, Andres
CORPORATE SOURCE: Discovery Research, Ligand Pharmaceuticals, San Diego, CA, 92121, USA
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (2007), 104(49), 19244-19249
CODEN: PNASA6; ISSN: 0027-8424
PUBLISHER: National Academy of Sciences
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Glucocorticoids are commonly used anti-inflammatory agents whose use is limited by side effects. The authors have developed a series of glucocorticoid receptor (GR) ligands that retain the strong anti-inflammatory activity of conventional glucocorticoids with reduced side effects. The authors present a compound, LGD5552, that binds the receptor efficiently and strongly represses inflammatory gene expression. LGD5552 bound to GR activates gene expression somewhat differently than glucocorticoids. It activates some genes with an efficacy similar to that of the glucocorticoids. However, other glucocorticoid-activated genes are not regulated by LGD5552. These differences may be because of the more efficient binding of corepressor in the presence of LGD5552, compared with glucocorticoid agonists. This class of nonsteroidal, GR-dependent anti-inflammatory drugs may offer a safer alternative to steroidal glucocorticoids in the treatment of inflammatory disease.
IT 864054-14-8, LGD 5552
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antiinflammatory glucocorticoid receptor ligand with reduced side effects exhibits an altered protein-protein interaction profile)
RN 864054-14-8 CAPLUS
CN 1H-[1]Benzopyrano[3,4-f]quinolin-9-ol, 5-[(2-fluoro-3-methylphenyl)methylene]-2,5-dihydro-10-methoxy-2,2,4-trimethyl-, (5Z)-(CA INDEX NAME)

Double bond geometry as shown.

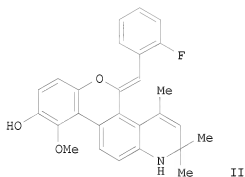
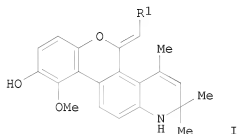


REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2005:979655 CAPLUS <<LOGINID:20080819>>
 DOCUMENT NUMBER: 143:286410
 TITLE: Preparation of 5H-chromeno[3,4-f]quinolines as glucocorticoid receptor modulators
 INVENTOR(S): Zhi, Lin; Ardecky, Robert J.; Phillips, Dean; Tyhonas, John S.; Karanewsky, Donald S.; Higuchi, Robert I.; Hudson, Andrew Richard; Roach, Steven L.; Vassar, Angie C.; Li, Yongkai; Adams, Mark E.; Valdez, Lino Juan; Cuervo, Catalina
 PATENT ASSIGNEE(S): Ligand Pharmaceuticals Incorporated, USA
 SOURCE: PCT Int. Appl., 352 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005082909	A1	20050909	WO 2005-US6627	20050224
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2557278	A1	20050909	CA 2005-2557278	20050224
EP 1718653	A1	20061108	EP 2005-724220	20050224
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK,			
BA, HR, IS, YU			
CN 1950375	A	20070418	CN 2005-80013058
BR 2005007987	A	20070731	BR 2005-7987
JP 2007523950	T	20070823	JP 2007-500828
MX 2006PA09544	A	20061115	MX 2006-PA9544
IN 2006DN04910	A	20070810	IN 2006-DN4910
US 20070281959	A1	20071206	US 2007-589920
PRIORITY APPLN. INFO.:			US 2004-548154P
			WO 2005-US6627
OTHER SOURCE(S):		MARPAT 143:286410	
GI			



AB Title compds. I [R1 = (un)substituted Ph, pyridin-2-yl, furan-2-yl, thiophen-2-yl, pyrrol-2-yl; and their pharmaceutically acceptable derivs.; with provisos] were prepared as selective glucocorticoid receptor (GR) modulators and/or selective glucocorticoid binding agents. Thus addition of 2-fluorobenzylmagnesium bromide (formed in-situ from 2-fluorobenzyl bromide and Mg) to 9-hydroxy-10-methoxy-2,2,4-trimethyl-1,2-dihydro-5H-chromeno[3,4-f]quinolin-5-one in Et2O, and treatment with p-TSA in DCM gave chromenoquinoline II. II bound to GR with Ki < 1 nM. I are useful for treating diseases mediated by or in which GR activity is implicated such as inflammatory, autoimmune and hyperproliferative diseases (no data).

L5 ANSWER 1 OF 1 USPATFULL on STN

ACCESSION NUMBER: 2007:322627 USPATFULL <<LOGINID::20080819>>
TITLE: Glucocorticoid receptor modulator compounds and methods
INVENTOR(S): Zhi, Lin, San Diego CA 92130, CA, UNITED STATES
PATENT ASSIGNEE(S): LIGAND PHARMACEUTICALS INCORPORATED, SAN DIEGO
CALIFORNIA, CA, UNITED STATES, 92121-1117 (U.S.
corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 20070281959	A1	20071206
APPLICATION INFO.:	US 2005-589920	A1	20050224 (10)
	WO 2005-US6627		20050224
			20070420 PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-548154P	20040225 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FISH & RICHARDSON, PC, P.O. BOX 1022, MINNEAPOLIS, MN, 55440-1022, US	
NUMBER OF CLAIMS:	137	
EXEMPLARY CLAIM:	1	
LINE COUNT:	10210	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L6 ANSWER 1 OF 2 TOXCENTER COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2008:17529 TOXCENTER <<LOGINID::20080819>>
COPYRIGHT: Copyright 2008 ACS
DOCUMENT NUMBER: CA14812253667R
TITLE: Antiinflammatory glucocorticoid receptor ligand with reduced side effects exhibits an altered protein-protein interaction profile
AUTHOR(S): Miner, Jeffrey N.; Ardecky, Bob; Benbatoul, Khalid; Groffoths, Kimberly; Larson, Christopher J.; Mais, Dale E.; Marschke, Keith; Rosen, Jon; Vajda, Eric; et al.
CORPORATE SOURCE: Discovery Research, Ligand Pharmaceuticals, San Diego, CA, 92121, USA.
SOURCE: Proceedings of the National Academy of Sciences of the United States of America, (2007) Vol. 104, No. 49, pp. 19244-19249.
CODEN: PNASA6. ISSN: 0027-8424.
COUNTRY: UNITED STATES
DOCUMENT TYPE: Journal
FILE SEGMENT: CAPLUS
OTHER SOURCE: CAPLUS 2008:24690
LANGUAGE: English
ENTRY DATE: Entered STN: 15 Jan 2008
Last Updated on STN: 18 Mar 2008
AB Glucocorticoids are commonly used anti-inflammatory agents whose use is limited by side effects. The authors have developed a series of glucocorticoid receptor (GR) ligands that retain the strong anti-inflammatory activity of conventional glucocorticoids with reduced side effects. The authors present a compound, LGD5552, that binds the receptor efficiently and strongly represses inflammatory gene expression. LGD5552 bound to GR activates gene expression somewhat differently than glucocorticoids. It activates some genes with an efficacy similar to that of the glucocorticoids. However, other glucocorticoid-activated genes are not regulated by LGD5552. These differences may be because of the more efficient binding of corepressor in the presence of LGD5552, compared with glucocorticoid agonists. This class of nonsteroidal, GR-dependent anti-inflammatory drugs may offer a safer alternative to steroidal glucocorticoids in the treatment of inflammatory disease.

L6 ANSWER 2 OF 2 TOXCENTER COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:264478 TOXCENTER <<LOGINID::20080819>>
COPYRIGHT: Copyright 2008 ACS
DOCUMENT NUMBER: CA14316286410B
TITLE: Preparation of 5H-chromeno[3,4-f]quinolines as glucocorticoid receptor modulators
AUTHOR(S): Zhi, Lin; Ardecky, Robert J.; Phillips, Dean; Tyhonas, John S.; Karanewsky, Donald S.; Higuchi, Robert I.; Hudson, Andrew Richard; Roach, Steven L.; Vassar, Angie C.; et al.
CORPORATE SOURCE: ASSIGNEE: Ligand Pharmaceuticals Incorporated
PATENT INFORMATION: WO 2005082905 A1 9 Sep 2005
SOURCE: (2005) PCT Int. Appl., 352 pp.
CODEN: PIXXD2.
COUNTRY: UNITED STATES
DOCUMENT TYPE: Patent
FILE SEGMENT: CAPLUS
OTHER SOURCE: CAPLUS 2005:979655

LANGUAGE: English

ENTRY DATE: Entered STN: 4 Oct 2005

Last Updated on STN: 30 Jan 2007

AB Title compds. I [R1 = (un)substituted Ph, pyridin-2-yl, furan-2-yl, thiophen-2-yl, pyrrol-2-yl; and their pharmaceutically acceptable derivs.; with provisos] were prepared as selective glucocorticoid receptor (GR) modulators and/or selective glucocorticoid binding agents. Thus addition of 2-fluorobenzylmagnesium bromide (formed in-situ from 2-fluorobenzyl bromide and Mg) to 9-hydroxy-10-methoxy-2,2,4-trimethyl-1,2-dihydro-5H-chromeno[3,4-f]quinolin-5-one in Et₂O, and treatment with p-TSA in DCM gave chromenoquinoline II. II bound to GR with K_i < 1 nM. I are useful for treating diseases mediated by or in which GR activity is implicated such as inflammatory, autoimmune and hyperproliferative diseases (no data).